Materials Declaration Form

IPC	**1752**	**Version**	**2**
Form Type *	Distribute		
Sectionals *	Material Info Manufacturing Info	**Subsectionals ***	A-D ***: Required Field**

Supplier Information			
Company Name *	STMicroelectronics	**Response Date ***	2015-05-22
Contact Name *	Refer to " Supplier Comment" section	**Contact Title**	Refer to " Supplier Comment" section
Contact Phone *	Refer to " Supplier Comment" section	**Contact Email ***	Refer to " Supplier Comment" section
Authorized Representative *	Giovanni Giacopello	**Representative Title**	AMS & IPD Materials Declaration Champion
Representative Phone *	Refer to " Supplier Comment" section	**Representative Email ***	Refer to " Supplier Comment" section
Supplier Comment	Online Technical Support - STMicroelectronics : http://www.st.com/web/en/support/online_tech_support.html		

Uncertainty Statement

While STMicroelectronics has endeavored to provide information which is accurate and up to date, this document and its contents are provided on a strict 'as is' and 'as available' basis. STMicroelectronics disclaims all warranties, express or implied related to this document and its contents, including but not limited to implied warranties of completeness, truth, accuracy, merchantability, fitness for a particular purpose and non-infringement. ST shall have no responsibility and assumes no liability for any cost, loss or damage of any kind which could arise, directly or indirectly, from the use or inability to use this document and/or its contents.

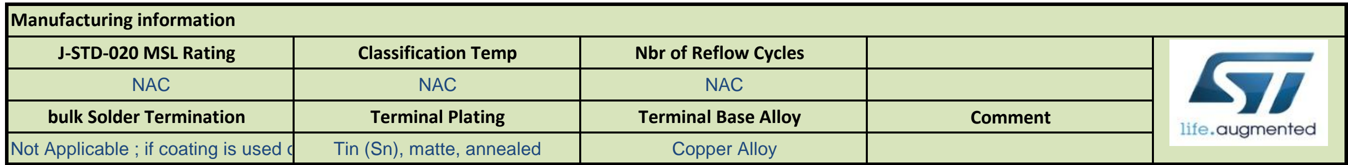
Legal Statement

Supplier Acceptance *	true	**Legal Declaration ***	Standard

Legal Statement

Supplier certifies that it gathered the provided information and such information is true and correct to the best of its knowledge and belief, as of the date that Supplier completes this form. Supplier acknowledges that Company will rely on this certification in determining the compliance of its products. Company acknowledges that Supplier may have relied on information provided by others in completing this form, and that Supplier may not have independently verified such information. However, in situations where Supplier has not independently verified information provided by others, Supplier agrees that, at a minimum, its suppliers have provided certifications regarding their contributions to the part(s), and those certifications are at least as omprehensive as the certification in this paragraph. If the Company and the Supplier enter into a written agreement with respect to the identified part(s), the terms and conditions of that agreement, including any warranty rights and/or remedies provided as part of that agreement, will be the sole and exclusive source of the Supplier’s liability and the Company’s remedies for issues that arise regarding information the Supplier provides in this form.

Product				
Mfr Item Number	Mfr Item Name	Version	Mfr Site	Date
	TSIK*MQF1B6F	A	Z8GA	2015-05-22
	Amount	UoM	Unit type	ST ECOPACK Grade
	310.00	mg	Each	ECOPACK® 2



Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		
NAC	NAC	NAC		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Not Applicable ; if coating is used c	Tin (Sn), matte, annealed	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
DIP	6.1 - 6.5 - 2.3	3	Through-hole	
Comment	Package: IPAK TO-251; MDF valid for APP1165UM2; STU11N65M2			

QueryList : ROHS directive 2011/65/EU _ July 2011	
Query	**Response**
Product(s) meets EU RoHS requirement without any exemptions	false
Product(s) meets EU RoHS requirements except lead in solder and this usage may qualify under the lead in solder '7b' exemption (other selected exemptions may apply)	false
Product(s) meets EU RoHS requirements by application of the selected exemption(s)	**true**
Product(s) does not meet EU RoHS requirements and is not under exemptions	false
Product(s) is obsolete, no information is available	false
Product(s) is unknown, no information is available	false

Exemption Id.	Description
7a	Lead in high melting temperature type solders (i.e. lead- based alloys containing 85 % by weight or more lead)

QueryList : REACH-17th December 2014				
Query				**Response**
The product does not contain REACH Substances Of Very High Concern above the limits per the definition within REACH				**true**
CategoryLevel_Name	CategoryLevel_Threshold	amount in product (mg)	Application	ppm in product

Material Composition Declaration						**Mfr Item Name**	**TSIK*MQF1B6F**					
Homogeneous Material	**Material Group**	Mass	**UoM**	**Level**	**Substance Category**	**Substance**	**CAS**	**Exempt**	**Mass**	**UoM**	**Concentration in homogeneous material (ppm)**	**Concentration in product (ppm)**
die (s)	Other inorganic materials	4.721	mg	supplier	die	Silicon (Si)	7440-21-3		4.534	mg	960390	14626
die (s)				supplier	metallization	Aluminium (Al)	7429-90-5		0.09	mg	19064	290
die (s)				supplier	passivation	Silicon Nitride (SiN)	12033-89-5		0.021	mg	4448	68
die (s)				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.032	mg	6778	103
die (s)				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.002	mg	424	6
die (s)				supplier	back side metallization	Silver(Ag)	7440-22-4		0.031	mg	6566	100
die (s)				supplier	back side metallization	Silver (Ag)	7440-22-4		0.011	mg	2330	35
Lead-frame	Other inorganic materials	148.155	mg	Supplier	Alloy	Copper (Cu)	7440-50-8		147.847	mg	997921	476926
Lead-frame				Supplier	Alloy	Iron (Fe)	7439-89-6		0.148	mg	999	477
Lead-frame				Supplier	Alloy	Phosphorus (P)	12185-10-3		0.045	mg	304	145
Lead-frame				Supplier	Alloy	Nickel (Ni)	7440-02-0		0.115	mg	776	371
Soft solder	Solder	1.467	mg	supplier	solder	Tin(Sn)	7440-31-5		0.003	mg	2045	10
Soft solder				supplier	solder	Silver(Ag)	7440-22-4		0.038	mg	25903	123
Soft solder				supplier	solder	Lead (Pb)	7439-92-1	7a-Lead in high mel	1.426	mg	972052	4600
Bonding wire	Other inorganic materials	0.961	mg	supplier	Bonding wire	Aluminium (Al)	7429-90-5		0.961	mg	1000000	3100
encapsulation	Other inorganic materials	149.46	mg	supplier	Molding compound	Silica Fused	60676-86-0		119.569	mg	800007	385706
encapsulation				supplier	Molding compound	Epoxy Resin	Proprietary		14.946	mg	100000	48213
encapsulation				supplier	Molding compound	Phenol Resin	Proprietary		9.714	mg	64994	31335
encapsulation				supplier	Molding compound	Carbon Black	14808-60-7		5.231	mg	34999	16874
connections coating	Solder	5.236	mg	supplier	solder alloy	Tin(Sn)	7440-31-5		5.236	mg	1000000	16890